National Transportation Safety Board
PRELIMINARY REPORT
AVIATION

NTSB ID: DCA08MA098 Most Critical Injury: Fatal

Occurrence Date: 09/19/2008 Investigated By: NTSB

Location/Time

 Nearest City/Place
 State
 Zip Code
 Local Time
 Time Zone

 Columbia
 SC
 2353
 EDT

Occurrence Type: Accident

Aircraft Information

Registration Number Aircraft Manufacturer Model/Series Number

N999LJ Leariet LR60

Type of Aircraft: Airplane

Amateur Built Aircraft? No

Injury Summary:

Fatal

4

Serious

2

Minor

None

Revenue Sightseeing Flight: No Air Medical Transport Flight: No

Narrative

Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:

On September 19, 2008, at about 11:53 p.m. EDT, a Learjet Model 60 (N999LJ) overran runway 11 while departing Columbia Metropolitan Airport (CAE), Columbia, South Carolina. The airplane had arrived about 40 minutes earlier to pick up the passengers, two popular musicians and their support staff, and proceed to Van Nuys, California. The flight was operated by Global Exec Aviation as a non-scheduled domestic passenger flight under the provisions of Title 14 CFR Part 135. Tire debris and portions of airplane components were found along the 8,600 foot runway. According to witnesses and initial information, the beginning of the takeoff roll appeared normal, then sparks were observed as the airplane traveled along the runway. At about 136 knots, the crew attempted to reject the takeoff, however they were unable to stop the airplane before exiting the runway. The airplane continued beyond the runway blast pad and through the approximately 1,000 foot runway safety area while striking airport lighting, navigation facilities, a perimeter fence and concrete marker posts. The airplane then crossed a roadway and came to rest where it struck an embankment on the far side of the road.

The 2 crewmembers and 2 of the 4 passengers were fatally injured, the other 2 passengers suffered serious injuries. The aircraft was destroyed by extensive post-crash fire. There was also damage to the airport lighting, a navigation antenna array; and perimeter fencing.

The accident captain held an Airline Transport Pilot certificate with a Lear 60 type rating and had logged approximately 3,140 hours total flight time and approximately 35 hours in Lear 60 airplanes. The accident First Officer held an Airline Transport Pilot certificate with a Lear 60 type rating and had logged approximately 8,200 hours total flight time and approximately 300 hours in Lear 60 airplanes.

The Learjet model 60 is a twin engine business jet with a nominal 8 passenger capacity. Records shows the date of manufacture for N999LJ was January 30, 2007. The airplane was purchased by the current owner on October 25, 2007 and the operator began to use the airplane for charter flights about six weeks before the accident. The airplane had logged less than 120 flight hours total. The airplane was equipped with two Pratt & Whitney Canada PW305A engines, rated at a maximum 4679 pounds of thrust.

A Special weather observation taken by the control tower at the time of the accident indicated the winds were from 060 degrees at 7 knots, visibility was 10 statute miles under clear skies, temperature 19 degrees Celsius, dewpoint 13 degrees Celsius, and the sea level barometric pressure was 30.23 inches of mercury.

Columbia Metropolitan Airport Runway 11/29 was 8601 feet in length and 150 feet in width with a grooved asphalt surface. The runway safety area was 1,000 feet in length and 500 feet in width. At the time of the accident, the intersecting runway (05/23) was 8,001 feet in length and 150 feet in width, and was closed due to construction.

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Narrative (Continued)

The airplane came to rest along a southeasterly orientation, nose-up on the side of a hill of approximately 25-30 degree slope. With the exception of all three landing gear, right delta fin, and right wing flap, all major airplane assemblies were found in the expected orientations. The top and right side of the fuselage had burned away to about the level of the cabin floor. The aft fuselage was mostly consumed by fire as far aft as the localizer antenna on the vertical stabilizer.

The first piece of tire debris was observed about 2300 feet from the departure end of runway 11. Numerous other piece of tire debris were located along the runway. Prior to the first piece of tire, five small pieces of broken taxiway reflector adhesive were found. Tire and skid marks could be followed on the runway and were spaced 100 inches apart (8 4) consistent with the spacing between the centers of the inboard left and outboard right wheels. Before reaching about 3400 foot of remaining runway, the left and right main gear tire rims scarred the runway surface.

The marks led past the runway and through four rows of gravel at the bases of the instrument landing system antenna components. Approximately 150 feet past the end of the pavement, near the first set of lights, the main landing gear pistons and wheel sets with the brake assemblies were found. The right main landing gear (squat) micro-switch was found on the grass near the main landing gear with short pieces of wire remaining. The left squat switch was also found on the grass, but with no wires.

The wheel sets were found with very little rubber other than tire beads attached. Grinding and friction damage was evident on all wheel and brake assemblies, with the most severe damage on the right outboard, and diminishing somewhat across to the left outboard. The right outboard wheel halves had the edges of both bead flanges ground completely away. The tire beads were missing. The general bottom features of the brake assembly were ground flat and the bottom of the ground area of the assembly exhibited heat-bluing. The hydraulic lines had extensive damage.

Preliminary examination of the right PW305A engine revealed that the accident exposed inlet guide vanes (IGV) and reference to a manufacturers chart showed the orientations were consistent with high power. The thrust reversers were in the retracted/stowed orientations.

The main cabin door was found closed and latched. The aft exit and fuselage area was destroyed by fire, however, the exit handle and one pin-type latch were found in debris. Both were in the open or unlatched position. One of the surviving passengers reported no difficulty opening the exit.

The operator, Global Exec Aviation, was established in 2002, in Long Beach, CA. GEA provides jet management and on-demand charter services. The company has approximately 20 employees including 11 pilots, and operated 9 airplanes including Gulfstreams, and a Falcon 50, Citation 650 and the Lear. GEA had no prior accidents recorded in the NTSB database.

Parties to the investigation include the FAA, Learjet, Global Exec Aviation, Pratt and Whitney Canada, TSB-Canada, and Goodyear.

TRANSO
National Transportation Safety Board
PRELIMINARY REPORT
ÁVIATION

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PRELIMÎNARY REPORT			Occurrence Date: 09/19/2008									
AVIATION			Occurrence Type: Accident				1					
Other A	Aircraft Involved											
Registrati	on Number	Aircraft Manufacture	er					Model/Se	ries Nun	nber		
	nt Information											
Aircraft [Damage: Destroyed			Acc	ident C	Occurred Duri	ng: Ta	keoff - abort	ed			
Crew	N	ame		Certificate No.					Injury			
Pilot	On File					Fa						
2	On File							F	atal			
3												
4												
5												
6												
Operat	or Information											
Name Operator Designator Code Doing Business As Global Exec Avaition												
				ity ong B	State Zip Code CA					Э		
-Type of Certificate(s) Held:												
Air Carri	er Operating Certificate(s): On-demand Air	Taxi									
Operating Certificate:					0	Operator Certificate:						
Regulation	on Flight Conducted Und	ler: Part 135: Air T	axi & Co	mmuter								
Type of F	light Operations Conduc	ted: Non-scheduled	d; Domes	stic; Pass	enger	Only						
Flight F	Plan/Itinerary											
Type of	Flight Plan Filed: IFR								_			
Last Departure Point						State	Airpor	Airport Identifier				
Same as Accident/Incident Location							KCA	CAE				
Destination						State		ort Identifier				
Van Nuys						CA	KVN	NY				
Weathe	er Information											
Investigator's Source: Automated Report					Faci	Facility ID: CAE Observation Time (Local): 2345						
Sky/Lowest Cloud Condition: Clear					Ft. AGL							
Lowest C	Ceiling: None		-	Ft. AGL	٧	/isibility:	10	SM	Altim	neter:	30.23	"Hg
		PRELIMINARY	INFORM	MATION	- SUI	ВЈЕСТ ТО (CHAN	GE				Page 2

National Transportation Safety Board PRELIMINARY REPORT

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Occurrence Date: 09/19/2008

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AVIATION		Occurrence 7	ype: Accident						
Weather Information (Continued from page 2)									
Temperature: -7 °C De	ew Point: -1	0 °C Wind [Direction: 60						
Wind Speed: 7 Kts.	Gusts: 14 K	ts. Weath	er Conditions at Accident Site: Visua	al Conditions					
Administration Data									
Notification From			Date						
FAA			09/20/2008						
FAA District Office/Coordinator AAI-100			Investigator-In-Charge (IIC) William R. English						